# SECTION 32 12 16 ASPHALT PAVING

#### PART 1 - GENERAL

## 1.1 DESCRIPTION

A. This work shall cover the composition, mixing, placement and the protection of hot asphalt concrete pavement. The hot asphalt concrete pavement shall consist of an asphalt base course and asphalt surface course constructed in conformity with the lines, grades, thickness, and cross sections as shown. Each course shall be constructed to the depth, section, or elevation required by the drawings and shall be rolled and finished.

## 1.2 SUBMITTALS

- A. Provide the following information to COR prior to start of work:
- B. Data and Test Reports:
  - Asphalt Base/Surface Course: Aggregate source, gradation, soundness loss, percentage of wear, and other tests required by State Highway Department.
  - 2. Job-mix formula.

## C. Certifications:

- 1. Asphalt tack coat material certificate of conformance to Illinois Department of Transportation requirements.
- 2. Asphalt cement certificate of conformance to Illinois Department of Transportation requirements.
- Job-mix certification Submit plant mix certification that mix equals or exceeds the Illinois Department of Transportation Specification.

#### PART 2 - PRODUCTS

# 2.1 GENERAL

- A. Asphalt concrete materials shall conform to the requirements of the latest version of the State Highway Material Specifications, including amendments, addenda and errata. Where the term "Engineer" or "Commission" is referenced in the State Highway Specifications, it shall mean the VA Contracting Officer Representative (COR).
- B. Bituminous concrete base mix (for full depth crack repair areas); Use base asphalt mix approved by Illinois Dept of Transportation Standard Specifications for standard use on Illinois highways.
- C. Bituminous concrete surface course: Use surface asphalt mix approved by Illinois Dept of Transportation Standard Specifications for standard use on Illinois highways.

## 2.3 ASPHALTS

A. Comply with provisions of Asphalt Institute Specification SS2:

1. Asphalt cement: Penetration grade 50/60

2. Tack coat: Uniformly emulsified, grade SS-1H

## PART 3 - EXECUTION

#### 3.1 GENERAL

A. The Asphalt Concrete Paving equipment, weather limitations, job-mix formula, mixing, construction methods, compaction, finishing, tolerance, and protection shall conform to the requirements of the appropriate sections of the State Highway Specifications for the type of material specified.

## 3.2 MIXING ASPHALTIC CONCRETE MATERIALS

- A. Provide hot plant-mixed asphaltic concrete paving materials.
  - 1. Temperature leaving the plant: 143 degrees C(290 degrees F) minimum, 160 degrees C(320 degrees F) maximum.
  - 2. Temperature at time of placing: 138 degrees C(280 degrees F) minimum.

#### 3.3 PATCHING

- A. Hot Mix Asphalt Pavement: Sawcut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 300mm (12 inches) into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing aggregate base course to provide new subgrade.
- B. Tack Coat: Apply uniformly to vertical and horizontal surfaces abutting area to receive new hot mix asphalt paving at a rate of 0.2 to 0.7 L/sq.M. (0.05 to 0.15 gal./sq. yd.
  - 1. Allow tack coat to cure before applying hot mix asphalt paving.
  - 2. Avoid smearing or staining adjoining surfaces, remove spillage and clean affected surfaces.
- C. Patching: Fill excavated pavement with hot mix asphalt base mix for full thickness of patch; while still hot compact flush with adjacent pavement surface.

# 3.4 FINAL CLEAN-UP

A. Remove all debris, rubbish, and excess material from the work area.

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